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(54) Title: NITROREDUCTASE BIOSENSORS FOR DETECTING NITRO-COMPOUNDS

T	7 promoter primer #69348-	3			
pET upstream primer #69214-3 ———  Bg/ II	T7 promoter	lac operator	X <u>b</u> a I_		rbs_
AGATCTCGATCCCGCGAAA	TTAATACGACTCACTATAGG	GGAATTGTGAGCGGATAACAA	ATTCCCCTCTAGAAATA	ATTTTGTTTAACTT	TAAGAAGGAG
Nco l	His•Tag		Nde   Nhe I	T7•Tag	
TATACCATGGGCAGCAGCC	ATCATCATCATCATCACAGC	AGCGGCCTGGTGCCGCGCGG SørGlyLeuValProArgGly	AGCCATATGGCTAGCA /SerHisMetAloSerM	TGACTGGTGGACAG etThrGlyGlyGlr	CAA nGIn
<i>Bam</i> H I <i>E∞</i> R	ti Sact Sali Hindi⊪	Eag i	ombin His•Tag		
ATGGGTCGCGGATCCGAAT		TGCGGCCGCACTCGAGCACCA	ACCACCACCACCACTGA ProProProProLeuA		
	<i>Bpu</i> 1102 i		T7 terminator		
GAAAGGAAGCTGAGTTGGC	TGCTGCCACCGCTGAGCAAT	AACTAGCATAACCCCTTGGGG	CCTCTAAACGGGTCTT	GABGGGTTTTTTG	
	77 terminator prim	ner #69337-3			

(57) Abstract: This invention provides a sensing device comprising an electrode comprising a noble metal layer, on which layer is located a biological material having nitroreductase activity. This invention further provides a method of detecting nitro group containing compounds, the method comprising the steps of: (a) providing a sensing device of the first aspect of the invention and a reference electrode; (b) applying a potential between the electrodes; (c) measuring the current; (d) contacting the sensing device with a cample of cubetrate material to be tested, and (a) measuring the current change